Teacher- and School-Related Factors Influencing Implementation of the Daily Physical Activity (DPA) Policy in Ontario Elementary Schools

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Introduction

• Ontario’s DPA policy mandates that all elementary school children participate in 20 minutes (duration) of sustained moderate to vigorous physical activity (MVPA) (intensity) during instructional time each school day (frequency) (Ontario Ministry of Education [OMOE], 2005). However, province-wide research suggests that only 50% of elementary teachers adhere to the DPA policy (Public Health Ontario, 2015).

• To date, the literature specific to Ontario’s DPA policy has concentrated on Southern regions of the province, neglecting Northern perspectives. Schools in Northern regions have the lowest average elementary school sizes (People for Education, 2012) and therefore receive less monetary support from the province (People for Education, 2015), thus introducing variability in implementation settings.

• Further, there is a paucity of research linking teaching strategies to implementation fidelity. Teachers’ behaviour, perspectives, and motivation to comply with the beliefs of their school’s administration and broader social culture contribute to varying implementation contexts, and in turn to the students’ exposure to PA opportunities (Martin et al., 2001).

• In order to facilitate context-specific delivery modifications that will benefit students province-wide, this study addressed the need to identify key strategies for improved DPA implementation, and to determine if strategic target areas are the same within a more Northern sample versus those studied in previous research.

Purpose: To examine elementary school teachers’ self-reported adherence to Ontario’s DPA policy, and to explore delivery models as well as teacher- and school-level factors influencing its implementation.

Participants and Methods

Self-identified Ontario elementary school teachers (n = 66) recruited through snowball sampling.

<table>
<thead>
<tr>
<th>Teaching Experience: 10-19 yrs</th>
<th>47%</th>
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<tr>
<td>No H&amp;PE specialization</td>
<td>55.60%</td>
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<tr>
<td>Teaching Experience: 10-19 yrs</td>
<td>66%</td>
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<tr>
<td>Female</td>
<td>83.30%</td>
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<td>n = 59 responses from online anonymous survey (Survey Monkey) retained for analysis following screening for completion.</td>
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Conceptual Model: Measures and Data Analysis

Demographic Characteristics and Delivery Models

- Gender, geographical location, grade level, presence of school-wide policies, inclusion of DPA on daily schedule, delivery of a variety of activities across sessions, use of warm-up/cool-down within sessions

- Cross-tabulations (χ²) and group comparisons examined relationships between categorical variables and DPA outcomes.

- Multinomial logistic regression identified categorical variables that best discriminate DPA adherence groups.

DPA Outcomes

- DPA Frequency
- DPA Duration
- DPA Intensity

Regression analyses identified teacher and school level predictors of DPA components.

Overall DPA Adherence

Why are Teachers (Not) Delivering DPA as Prescribed?

Support

Confidence

Subjective Norms

Attitudes

Knowledge

Self-Identity

Resources

DPA Adherence

(Wilks’ lambda = .57, χ²(7) = 27.27, p < .001)

Multiple regressions: Solid lines represent significant predictors; dashed lines represent non-significant contributors to the model.

DPA: Solid lines represent measures that significantly discriminate between DPA adherence groups (ps < .05).

Discussion and Conclusion

- The majority of the participants were classified as not adhering to the DPA policy guidelines, with a median implementation score of 69%, which corroborates national (Olstad et al., 2015) and provincial (Patton, 2012, PHO, 2015) self-reported findings, as well as those derived from objectively measured PA levels in southern Ontario elementary schools (Stone et al., 2012).

- This study adds to the findings that consider the policy’s individual components (PHO, 2015; Stone et al., 2012) and highlights the need for implementation strategies at the policy- (e.g., increase its accessibility and affordability), school- (e.g., implement school-wide position on curricular PA), and teacher- (e.g., increase awareness of existing curriculum support and implementation guides ) levels.

- Recommendations advocate for: the inclusion of DPA on teachers’ daily schedules; dissemination of information to key stakeholders (e.g., DPA links/infographics in school newsletters, discussion of innovative implementation strategies in staff meetings); and, increased collaboration between teachers and health promoters/DPA ‘champions’ (e.g., DPA workshops).

A list of all reference information is available from the first author: Tara.McGoey@canadorecollege.ca